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10/541,434	12/08/2005	Roger Barrett	21494.016	6388

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EXAMINER	
PREVIL, DANIEL	
ART UNIT	**PAPER NUMBER**
2612	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,434	BARRETT ET AL.	
	Examiner	Art Unit	
	Daniel Previl	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/05/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 15-34 are objected to because of the following informalities: Claim 15, insert ----hazard--- in lines 2-3, between "the and detector during a start-up". Claim 15, insert ----hazard--- in line 3 between "the and detector". Claim 25, insert ---hazard--- in line 2, between "the and detector". Claim 25, insert ----hazard---- in line 4, between "the and detector". Appropriate correction is required.

Claims 16-24, 26-34 are objected for the same reason, since they depend from objected claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15, 29-34, are rejected under 35 U.S.C. 102(b) as being anticipated by Garrick et al. (PCT/AU95/00493).

Regarding claims 15, 34, Garrick teaches a hazard detector comprising means for detecting a hazardous condition and for indicating an alarm upon such detection (page 10, lines 17-28) and means for modifying the behaviour of the detector during a start-up or test-mode to facilitate commissioning or testing of the detector (page 11, lines 6-32).

Regarding claim 29, Garrick discloses a light signal (LED in page 8, line 17).

Regarding claim 30, Garrick discloses flashing light signal with repetitive on/off cycle (flashing light in page 8, line 3).

Regarding claim 31, Garrick discloses wherein the period of the on/off cycle is approximately one second (flashing light in page 8, line 3).

Regarding claim 32, Garrick discloses wherein the flashing light signal is produced by a light-emitting diode (LED) that forms part of the electronic circuit (LED in page 8, line 17).

Regarding claim 33, Garrick discloses wherein the LED is red-coloured (LED in page 8, line 17).

4. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Kiernan (US 2,843,726).

Regarding claim 25, Kiernan discloses a hazard detector for connection between positive and negative power lines (fig. 2), the detector having a positive terminal and a negative terminal and being adapted, upon application of power to the power lines, to emit a local indicator signal if the positive and negative terminals of the detector have a correct polarity orientation to the positive and negative lines. (fig. 2; col. 3, lines 52-63).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Tice et al. (US 5,117,219).

Regarding claim 16, Garrick discloses all the limitations set forth in claim 15 but fails to explicitly disclose wherein the hazardous condition is a hazardous smoke level.

However, Tice discloses the hazardous condition is a hazardous smoke level (col. 5, lines 21-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Tice's smoke level into Garrick's system in order to accurately detect the level of the smoke for immediate action thereby improving the safety of the system.

Regarding claim 17, Garrick discloses all the limitations set forth in claim 15 but fails to explicitly disclose wherein the hazardous condition is a hazardous rate of rise in temperature.

However, Tice discloses the hazardous condition is a hazardous rate of rise in temperature (col. 5, lines 21-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Tice's rise in temperature into Garrick's system in order to accurately detect the level of the smoke for immediate action thereby improving the safety of the system.

Regarding claim 18, Although, Garrick and Tice disclose all the limitations set forth in claim 17 but fail to explicitly disclose wherein the hazardous rate of rise in temperature is a rate of temperature that is equal to , or exceeds, approximately five degrees over a period of thirty seconds. Since, Tice discloses smoke level temperature (col. 5, lines 21-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to activate an alarm when the smoke temperature is equal or exceeds five degrees over a period of thirty seconds thereby increasing the safety of the system.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Natale et al. (US 4,818,970).

Regarding claim 19, Garrick discloses all the limitations set forth in claim 15 but fails to explicitly disclose means for filtering-out transient detections of the hazardous condition during a normal state of operation, the modifying means comprising means for disabling the filtering means during the start-up or test mode.

Natale discloses means for filtering-out transient detections of the hazardous condition during a normal state of operation (col. 9, lines 1-27), the

modifying means comprising means for disabling the filtering means during the start-up or test mode (col. 9, lines 40-44 and lines 60-62).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Natale's disabling the filtering means during the start-up or test mode into Garrick's system in order to accurately detect an alarm condition thereby improving the efficiency of the system..

8. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Tice as applied to claim 15 above, and further in view of Natale et al. (US 4,818,970).

Regarding claims 20-22, Garrick and Tice disclose all the limitations set forth in claim 15 but fail to explicitly disclose means for filtering-out transient detections of the hazardous condition during a normal state of operation, the modifying means comprising means for disabling the filtering means during the start-up or test mode.

Natale discloses means for filtering-out transient detections of the hazardous condition during a normal state of operation (col. 9, lines 1-27), the modifying means comprising means for disabling the filtering means during the start-up or test mode (col. 9, lines 40-44 and lines 60-62).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Natale's disabling the filtering means during the start-up or test mode into Garrick and Tice's system in order to

accurately detect an alarm condition thereby improving the efficiency of the system.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Kiernan (US 2,843,726).

Regarding claim 23, Garrick discloses all the limitations set forth in claim 15 but fails to explicitly disclose being for connection between positive and negative power lines, the detector having a positive terminal and a negative terminal and being adapted, upon application of power to the power lines, to emit a local indicator signal if the positive and negative terminals of the detector have a correct polarity orientation to the positive and negative lines.

However, Kiernan discloses being for connection between positive and negative power lines, the detector having a positive terminal and a negative terminal and being adapted, upon application of power to the power lines, to emit a local indicator signal if the positive and negative terminals of the detector have a correct polarity orientation to the positive and negative lines. (fig. 2; col. 3, lines 52-63).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Kiernan's correct polarity into Garrick's system in order to efficiently test the polarity of the smoke detector thereby improving the accuracy of the system.

10. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Natale as applied to claim 15 above, and further in view of Kiernan (US 2,843,726).

Regarding claim 24, Garrick and Natale disclose all the limitations set forth in claim 15 but fail to explicitly disclose being for connection between positive and negative power lines, the detector having a positive terminal and a negative terminal and being adapted, upon application of power to the power lines, to emit a local indicator signal if the positive and negative terminals of the detector have a correct polarity orientation to the positive and negative lines.

However, Kiernan discloses being for connection between positive and negative power lines, the detector having a positive terminal and a negative terminal and being adapted, upon application of power to the power lines, to emit a local indicator signal if the positive and negative terminals of the detector have a correct polarity orientation to the positive and negative lines. (fig. 2; col. 3, lines 52-63).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Kiernan's correct polarity into Garrick and Natale's system in order to efficiently test the polarity of the smoke detector thereby improving the accuracy of the system.

11. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrick in view of Kiernan as applied to claim 15 above, and further in view of Suzuki et al. (US 5,475,363).

Regarding claims 26-27, Garrick and Kiernan disclose all the limitations set forth in claim 15 but fail to explicitly disclose an electronic circuit serially-connected to a blocking diode, the blocking diode being connected to either the positive or negative terminal.

However, Suzuki discloses an electronic circuit serially-connected to a blocking diode, the blocking diode being connected to either the positive or negative terminal (fig. 8; col. 11, line 67; col. 12, lines 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Suzuki's blocking diode into Garrick and Kiernan's system in order to efficiently determine a correct polarity of the smoke detector thereby improving the accuracy of the system.

12. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiernan in view of Suzuki (US 5,475,363).

Regarding claim 28, Kiernan discloses all the limitations set forth in claim 25 but fails to explicitly disclose an electronic circuit serially-connected to a blocking diode, the blocking diode being connected to either the positive or negative terminal.

However, Suzuki discloses an electronic circuit serially-connected to a blocking diode, the blocking diode being connected to either the positive or negative terminal (fig. 8; col. 11, line 67; col. 12, lines 1-2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Suzuki's blocking diode into Kiernan's system in order to efficiently determine a correct polarity of the smoke detector thereby improving the accuracy of the system.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Govenius (US 5,013,567) discloses method for the generation of smoke for use in smoke-curing of foods.

Riveron et al. (US 5,716,725) discloses method apparatus for indicating improper coupling of a power source to an electronic device.

Ketler et al. (US 5,420,440) discloses optical obscuration smoke monitor having a shunt flow path located between two access ports.

Muchnick (US 3,932,790) discloses ground fault interrupter with reversed line polarity lamp indicator.

Hall, Jr. (US 5,751,215) discloses fire finding apparatus.

Payne (US 6,040,769) discloses detecting device and an alarm system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Previl whose telephone number is (571) 272-2971. The examiner can normally be reached on Monday-Thursday. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel WU can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel Previl
Examiner
Art Unit 2612

DP
December 4, 2007.

BENJAMIN C. LEE
PRIMARY EXAMINER